

**SYSTEM AND METHOD FOR CONFIDENCE  
BASED INCREMENTAL ACCESS AUTHENTICATION**

**ABSTRACT OF THE DISCLOSURE**

A system and method for providing continuous  
5 confidence-based authentication. The present invention may  
be implemented in an incremental access authentication  
system for controlling access to secured data having various  
levels of security. During the course of a conversational  
session between user and machine, a confidence-based  
10 authentication system according to the present invention  
will periodically analyze the input speech of a user  
interacting with the system to compute a "confidence  
measure" for the validity of an original identity claim *i*  
provided by the user at the commencement of the dialog  
15 session. The "confidence measure" computation process  
according to the present invention is seamlessly integrated  
into the incremental access authentication system so that  
the system can tailor its interaction with the user based on  
its confidence in the original identity claim.